

# 1. Anastasia

**Program Name:** Anastasia.java

**Input File:** None

Anastasia's little sister just learned about the square root of numbers in her elementary math class. Recall, that the square root of a number  $x$  is a number  $y$  such that  $y^2 = x$ . For example the square root of 400 is 20. This is true because  $20^2 = 20 * 20 = 400$ . Anastasia wants to make her little sister a study guide that can be used to check the square roots of the following numbers: 400, 361, 324, 289, 256, 225, 196, 169, 144, 121, 100, 81, 64, 49, 36, 25, 16, 9, 4, 1, and 0. Can you help her with this?

**Input:** There is no input for this problem.

**Output:** For each of the following numbers: 400, 361, 324, 289, 256, 225, 196, 169, 144, 121, 100, 81, 64, 49, 36, 25, 16, 9, 4, 1, and 0, you are to output "The square root of X is Y." Where  $Y^2 = X$ .

**Sample output:**

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The square root of 400 is 20.
The square root of 361 is 19.
The square root of 324 is 18.
The square root of 289 is 17.
The square root of 256 is 16.
The square root of 225 is 15.
The square root of 196 is 14.
The square root of 169 is 13.
The square root of 144 is 12.
The square root of 121 is 11.
The square root of 100 is 10.
The square root of 81 is 9.
The square root of 64 is 8.
The square root of 49 is 7.
The square root of 36 is 6.
The square root of 25 is 5.
The square root of 16 is 4.
The square root of 9 is 3.
The square root of 4 is 2.
The square root of 1 is 1.
The square root of 0 is 0.
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